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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/885,320

06/19/2001

Gary L. Gaebel

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4598

47915

7590

03/23/2005

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EXAMINER

JEAN PIERRE, PEGUY

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,320

Applicant(s)

GAEBEL ET AL.

Examiner

Peguy JeanPierre

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/11/04; 7/31/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements filed on 7/31/2003 and 3/11/2004 have been considered.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations of "reducing the number of symbols or assigning a code symbol to a pattern" or "replacing the symbols of a pattern with the code symbol" or "partitioning a plurality of ordered symbols sequences..." must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Response to Amendment

4. The reply filed on 1/20/2005 is not fully responsive to the prior Office Action because: the drawings do not show every feature of the claimed invention as set forth in the previous office action. The drawing is not adequate to enable an artisan having knowledge in the art to make and use the invention. For instance, Figures 1

Art Unit: 2819

illustrates an array of pixel, Figure 2 illustrates a data processing method and Figure 3, illustrates an adaptive data processing (see specification). The bit planes, the ordering of the bit planes, the symbol holding a place in the bit plane, the compression process, the symbols, all the features that are related and recited in the claims, described in the specification, and related to a compression/decompression process must be shown in the drawings to help the Examiner in determining the patentability of the invention. A second office action of the claims is precluded pending the submission of the drawings.

Since the period for reply set forth in the prior Office action has expired, this application will become abandoned unless applicant corrects the deficiency and obtains an extension of time under 37 CFR 1.136(a).

The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. In no case may an applicant reply outside the SIX (6) MONTH statutory period or obtain an extension for more than FIVE (5) MONTHS beyond the date for reply set forth in an Office action. A fully responsive reply must be timely filed to avoid abandonment of this application.

An art rejection of the claims as understood by the Examiner appears below.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2819

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (USP 6,570,510) in view of Belu (USP 6,522,268).

Chen et al. disclose a method of processing image that comprises a plurality of bit planes and each of the bit planes includes a plurality of ordered symbols (see col. 2, lines 37-47) or holds a place in the plurality of ordered sequences. Chen further discloses an arithmetic coder that codes the symbols representing the bit planes (see col. 5, lines 34-36). Chen does not teach the reducing of the number of symbols; the reducing of the number of bits; and the assignment of code to repetitive symbols.


Belu discloses a method of compressing image data that comprises a sorted (ordered) sequence of data (204 Fig.2) see col. 6, lines 42-45). Belu compresses the image data using run length limited code to reduce the number of bits, and further reduce the number of symbols by replacing repeating symbols with a code (see col. 11, lines 37-47). That is the repeated symbols must be identified, a code must be assigned to the

Art Unit: 2819

symbols and the repeated pattern replaced by the code and this can be done in a multiple processes. The method of Belu eliminates repetitive data in the compressed image. Therefore, it would have been obvious to one having ordinary skill in the art to implement the compression scheme of Belu by reducing the number of bits and symbols in the image compression method of Chen et al. for the benefit of increasing memory space so critical in compressing image data. It is to be noted that image data are formed of a plurality of pixels whose intensity/luminosity varied based on their bit planes composition.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peguy JeanPierre whose telephone number is (571) 272-1803/272-1803. The examiner fax phone number is (571) 273-1803.


Peguy JeanPierre
Primary Examiner